Service Quality Measurement Using SERVQUAL. An Applied Comparative Study on Customer Perceptions and Expectations under an International Approach

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This research uses the methodology Servqual in order to measure the quality of service given by a public university in Barcelona (Spain) to its study abroad students. The analysis explores the results not only from traditional approach based in a expectations versus perceptions point of view but from a more specific approach offering profiles of study abroad students from 5 different nationalities. The research collects information from 622 questionnaires and it provides useful insights related to future strategies for improving satisfaction and service at the host institution.

Keywords: *service quality, study abroad, education, international, marketing, customer satisfaction.*

JEL Classification: *M30, M31, M39*

1. Service Quality Measurement

Several models of service quality are already explored from an academic and professional point of view. There are many ways to evaluate quality, see for example the "functional quality" which refers to dimensions that describe the process by which technical quality is delivered to the customer, others have been evaluating the measurement of service quality under the dynamics of asymmetry dimensions of service including technical and functional items versus person-based and organization-based (Grönroos, 1984). The Servqual approach to service quality method appears in more than 5500 academic articles, it goes beyond the Grönroos models due to the fact that identifies dimensions of the service. The 5 dimensions that Servqual uses called informally *RATER (reliability, assurance, tangibles, empathy and responsiveness)* are quite appropriate for this research due to the following reasons. 1. The method breaks down the evaluation of the service into 5 more specific dimensions and the conceptualization of quality can be done at different moments of time (before the service is received and after/once the service has been delivered).

The description of the dimensions is classified as follows:

D1: Tangibles. This dimension of quality makes reference to the expected and perceived quality of the assets including buildings offices, computers, etc.
D2: Reliability. Ability to perform the promised service dependably and accurately.
D3: Responsiveness. Willingness to help customers and provide a quick service and answers.
D4: Assurance. Knowledge and courtesy of employees and their ability to convey trust and confidence.

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D5: Empathy. Capacity to wall with someone else's shoes. Personal attention, capacity of understanding others.

2. The research done

The main goal of the research done in the paper is to evaluate the situation of the service quality delivered by the "Study abroad department of a public university in the city of Barcelona". This department receives almost 1900 students each year. Most of students come from different countries to spend one academic semester in Barcelona. This research has collected answers from students from 5 different nationalities. These are: United States, China, Germany, Korea and Belgium. The department actually uses traditional surveys once the semester is over. These surveys help managers to understand the perception of service delivered to students (never influenced by academic performance) but still lacks of deep analysis about, nationalities, expectations perceptions and different dimensions of the service given to the students.

The research is conducted under a convenience sample of 702 students with a response rate of 88.6% (622 questionnaires duly filled). The rest of the sample shows that 62 people rejected answering and 18 of the received questionnaires had to be discarded due to lack of data or errors in data. The Servqual questionnaire was adapted to the needs of the university although it fully respected its original format. Not only information about the dimensions which determine the service where collected but information of the nationality of the student as well.

3. The process of research and data collection

The research process has been duly completed in a time frame of 2 years. It was done in students of fall and spring semesters in the years 2011 and 2012. All students were enrolled in business related courses.

Part 1: The 1st Servqual questionnaire was given to students the first day in the institution understanding that the service was not delivered yet. This action was perceived by most students as a good intention to provide the service.

Part 2: The 2nd Servqual questionnaire was given to the same students (making sure that each student in the sample answered the first one) once the service is delivered. A total of 43 of the students did not participate in the second round discarding these questionnaires.

The total sample made my 622 respondents is split as follows: *Students from USA: 398, students from Germany: 190, students from Belgium: 18, students from Korea: 11, students from China: 5*

4. Results and findings

The tabulation and calculation of results shows that in general terms it exist a negative value in all 5 Servqual dimensions. This reflects the need in general of the department to proceed with changes which can improve the situation of the service. The most important change should be oriented to reduce the gap in the dimension number 1 (Tangibles) Here the negative gap is the highest with a value of -1.1 points. Most of the students perceive that buildings, printers and facilities in general can be improved. This is supported by a second observational analysis of a small group of teachers that agree that the building where classes are taken is too small and too limited. (Although the level of satisfaction is quite good due to its centric placement in the city). The second most important dimension is dimension 2 (Reliability), here it is understood that the department must create mechanisms oriented in order to improve the ability to perform the promised service dependably and accurately. Dimensions 3 and 4 need little adjustments (gaps are -0.15 and –0.29 only) while D5 almost meets the expectations of the students (-0.03). See Table 1 next.

Table 1. Overall results

	Perceptions	Expectations	Gap
D1	3.05	4.17	-1.10
D2	3.28	4.18	-0.90
D3	3.20	3.35	-0.15
D4	3.51	3.80	-0.29
D5	2.99	3.02	-0.03

Source: Own research

5. Specific findings split by expectations, perceptions, nationalities and dimensions

The first classification makes reference to the binomial expectations versus nationality. Here the results demonstrate that the most demanding nationality is China with a value of 3.89 followed by Belgium, (3.72) and the USA (3.75). The nationality less demanding is South Korea with a value only of 3.44 (See table 2).

The second binomial refers to the variables expectations versus dimensions. Here the research tries to identify the most important dimensions of quality before receiving the service. The findings show that the most important dimension is D2 (Reliability) with a value of 4.21 while the less important one is D5 (Empathy) with a value of 2.97 including a significant deviation in both dimensions. (See table 2).

The third binomial to analyze is the one of perceptions versus nationality. Here the results shows that the nationality which perceives better quality in the institution is Korea with a value of 3.25 followed by Belgium with a value of 3.23. The perception with smaller value here goes to China with a value of 3.07. (See table 3).

The fourth binomial to be analyzed is the one "Perceptions versus dimensions". Here the dimension with the biggest value perceived is D4 (Assurance) with a numerical value of 3.52 and on the contrary the dimension worst perceived is D5 (empathy) with a value of 2.95. (See table 3)

Table 2. Results of expectations split by nationalities and dimensions.

	USA	GER	CHINA	KOREA	BELG	AVERAGE
D1	4,18	4,16	4,05	4,13	4,25	**4,154**
D2	4,18	4,17	4,12	4,37	4,23	**4,214**
D3	3,54	3,35	3,9	2,84	3,48	**3,422**
D4	3,81	3,79	3,95	3,52	3,8	**3,774**
D5	3,04	3,03	3,46	2,34	3	**2,974**
AVERAGE	**3,75**	**3,7**	**3,896**	**3,44**	**3,752**	

Source: Own research

Table 3. Results of perceptions split by nationalities and dimensions

	USA	GER	CHINA	KOREA	BELG	AVERAGE
D1	3,05	3,03	2,95	2,93	3,23	**3,038**
D2	3,28	3,28	2,84	3,34	3,4	**3,228**
D3	3,19	3,2	3,3	3,3	3,11	**3,22**
D4	3,51	3,52	3,67	3,47	3,45	**3,524**
D5	2,98	2,99	2,6	3,21	3	**2,956**
AVERAGE	**3,202**	**3,204**	**3,072**	**3,25**	**3,238**	

Source: Own research

The gap analysis of Perceptions versus Expectations split by nationality shows that the nationality most unsatisfied is China with a -0.82 followed by USA and Germany with values of -0.55 and -0.50 (moderately unsatisfied). On the other side Korean students show much less dissatisfaction with a numerical value of -0.19 (See table 4).

The gap analysis of Perceptions versus expectations split by dimensions shows that the most unsatisfied nationality is the USA with a value of -1.12 followed by Germany with -0.99. On the other side Belgium students look like almost satisfied showing a very small gap of only -0.02 in numerical value. (See table 5).

Table 4. Gap of Expectations – Perceptions per country

	USA	*GER*	*CHINA*	*KOREA*	*BELGIUM*
Gap 1	**-0,55**	**-0,5**	**-0,82**	**-0,19**	**-0,52**

Source: Own research

Table 5. Gap of Expectation – perceptions in dimensions

	USA	GER	CHINA	KOREA	BELGIUM
Gap 2	**-1,12**	**-0,99**	**-0,2**	**-0,25**	**-0,02**

Source: Own research

6. Limitations of the Research

Some of the results of this applied research present limitations as it follows: *1)* It appears a lack of statistical representativity in the nationalities China, Korea and Belgium due to the low number of samples. Still the author decided to include them to explore some potential differences with other nationalities. *2)* The classic limits of the Servqual questionnaire which measures satisfaction instead of quality, still due to the applied nature of the research the SQ method looks as the most appropriate. *3)* Cultural influences appear in the perceptions of the dimensions and expectations. The predefined experiences of the students, the quality of their universities of origin and the country image can impact on both expectations and perceptions of the service quality.

7. Conclusions

Overall, the department of Study Abroad of this university needs to improve seriously areas related to tangibles and reliability allocating resources in this direction. The Responsiveness and Assurance dimensions still need to be improved but significantly less than in the other two mentioned before. The last dimension (empathy) looks quite well showing no problems initially due to the fact that offer numerical values very close to the expectations of most students.

Making references to nationalities China is the most dissatisfied nationality while the most satisfied is Korea. The others present quite moderate level of dissatisfaction.

According to the service dimensions of Servqual it is quite conclusive that the company must pay attention to the management of assets and tangibles. Still students perceive that the campus can be much better managed and can offer better facilities. It is important as well to improve issues related to the dimension "Reliability", improving the process to perform the promised service dependably and accurately.

8. References

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